

## A NEW SPECIES OF THE GENUS *PHALACROTOPHORA* ENDERLEIN (DIPTERA, PHORIDAE) FROM CHINA

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**Abstract** A new species, *Phalacrotophora caudarguta* sp. nov., is described and illustrated from China. The type specimen is deposited in the Liaoning Key Laboratory of Urban Integrated Pest Management and Ecological Security, Shenyang University.

**Key words** Diptera, Phoridae, *Phalacrotophora*, new species, China.

The genus *Phalacrotophora* was established by Enderlein with the type species *P. bruesiana* Enderlein. Up to the present, 54 species were recorded in the world, of which 5 are distributed in China (Liu, 2001). The species of the genus are notable for their larvae being parasitoids of ladybirds (Coccinellidae), including Chinese species *P. quadrimaculata* Schmitz and *P. decimaculata* Liu. In the present paper, *P. caudarguta* is described as new to science. The type specimen is deposited in the Liaoning Key Laboratory of Urban Integrated Pest Management and Ecological Security, Shenyang University.

***Phalacrotophora caudarguta* sp. nov.** (Figs 1–10)

Male. Body length 2.66 mm.

Head. Frons yellow, shining, slightly higher than wide, and with sparse blackish hairs situated in punctures. Two pairs of supra-antennal bristles short, inclinate and subequal. Antial bristles near front edge of frons and much lower on frons than antero-lateral bristles. Second row of frontal bristles not straight, pre-ocellar bristles much lower on frons than medio-lateral bristles. Third antennal segment, brownish yellow, oval, about 0.16 mm long. Arista pre-apical yellow, 0.6 mm long, with tiny hairs. Palps pale yellow, with 9 short bristles.

Thorax. Tergites yellow, with blackish hairs and 2 dorso-central bristles, between them 4 bristle-like hairs present. Scutellum brown with yellowish sides, with 4 bristles. Pleuron pale yellow, bare. Legs yellow. Fore tibia 0.54 mm, with a row of 12 antero-dorsal spines. Mid tibia with a palisade, and two cilia, antero-dorsal cilia extending to 2/3 of tibia. Hind tibia with a palisade, and two cilia. Postero-dorsal cilia 12 long hairs, antero-dorsal cilia 10 long hairs. Wing

length 2.27 mm, greyish brown. Costal index 0.48. Costal ratios 4.44:3.11:1.00. Costal cilia 0.07 mm. Vein  $M_1$  and  $M_2$  curved at base. Halteres yellow.

Abdomen. Largely yellow. Tergites II–VI with speckles each sides, which curve to ventral side. Speckles with sparse hairs, and they are the longest on tergite II. Tergite II broadest, and gradually narrower backwards. Tergites II and III “V” concave. Hind edge of tergites II–V with a row of small hairs. Hypopygium yellow, both left and right sides of epandrium are subequal and acuminate. Hypandrium bilobed, with a U-shaped sclerite underside. Anal tube yellow and long.

Female. Unknown.

Holotype ♂, China, Guangxi Province, Songzuo City, Bapen Town, Bapen Nature Reserve in Guangxi, 18 Aug. 2004, CHEN Hong-Wei.

Etymology. The species name comes from “caud-” (tail) and “argutus” (sharp), referring the characters of epandrium.

Remarks. In the keys to Chinese species of *Phalacrotophora* (Liu, 2001), this species runs couplet 4 to *P. quadrimaculata* Schmitz and *P. decimaculata* Liu. It is different from the latter species by having two pairs of supra-antennal bristles. In the keys to Australasian, Eastern Palearctic and Oriental species of *Phalacrotophora* (Borgmeier, 1967), this species runs to couplet 10 to *P. magnifica* Borgmeier and *P. maculiterga*. It is different from the latter two species by the concaved second row of frontal bristles. In the keys to European species of *Phalacrotophora* (Disney, 1997), this species runs to couplet 3. It differs from *P. pictofasciata* Schmitz by epandrium with two acuminate preclinate process at left side and right side.

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Figs. 1 – 10. *Phalacrotophora caudarguta* male. 1. Left face of body. 2. Back face of body. 3. Head, mainly show frons. 4. Wing. 5. Fore leg, mainly show tibia. 6. Mid leg, mainly show tibia. 7. Hind leg, mainly show tibia. 8. Ventral face of male terminalia. 9. Right face of male terminalia. 10. Left face of male terminalia. Scale bars: 1, 4 = 1.0 mm; 2, 5 = 0.5 mm; 3, 6 – 7 = 0.2 mm; 8 – 10 = 0.1 mm.

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## 中国伐蚤蝇属一新种记述 (双翅目, 蚤蝇科)

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**摘要** 记述了中国伐蚤蝇属 1 新种, 尖尾伐蚤蝇 *Phalacrotophora caudarguta* sp. nov., 模式标本存于沈阳大学城市有害生物治理与生态安全辽宁省重点实验室。

尖尾伐蚤蝇, 新种 *Phalacrotophora caudarguta* sp. nov. (图 1 ~ 10)

雄性中胸侧板光裸, 腹部第 2 ~ 6 背板两侧各具 1 黑色斑点。新种与 *P. pictofasciata* Schmitz 相似, 但新种腹部第 2、第 3

背板下陷呈“V”型, 雄性尾器的生殖背板两侧具有尖形向下内倾的突起, 在生殖腹板基部具 1 “U”小骨片。

雌性 不详。

正模 1 ♂, 广西邕盆自然保护区, 2004-08-18, 陈宏伟采。

词源: 新种种名出自拉丁词“*caud-*”和“*argutus*”, 表示雄性尾器的生殖背板两侧具有尖形向下内倾的突起。

**关键词** 双翅目, 蚤蝇科, 伐蚤蝇属, 新种, 中国。

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